

**ABSTRACT OF THE DISCLOSURE**

A fluorochrome-marked sample is excited with the proper wattage and wavelength of light using an exciter or bandpass filter and beamsplitting mirror device. This causes the sample to emit light of a slightly higher wavelength than that of excitation. A subsequent barrier filter of the proper configuration placed between the sample and the observer allows this longer wavelength to be observed as fluorescence. This technique is particularly useful for viewing large biological specimens such as fish.